## Docket No.: DAD-0012

## **AMENDMENTS TO THE CLAIMS**

## Please amend the claims as set forth below.

- 1. (Currently amended) A method of automatic translation of sentences from a source language  $L_s$  selected from language  $L_1$  to  $L_n$  to a target language  $L_t$  selected from languages  $L_1$  to  $L_n$  comprising the steps of :
- (i) providing grammars  $G_1$  to  $G_n$  of all the languages  $L_1$  to  $L_n$  respectively, in which each grammar is unique to that particular language, and a text 'S' in the source language  $L_s$  as inputs;
- (ii) creating a unified grammar specification UG for the grammars  $G_l$  to  $G_n$ , in which equivalent grammar production rules of each grammar  $G_{\pm}$  to  $G_n$  are combined into a single unified production rule;
- (iii) separating the input text 'S' in the source language  $L_s$  into a list of tokens using a lexical analyser for the source language  $L_s$ ;
- (iv) setting a current non-terminal symbol to the start symbol of the unified grammar specification UG;
- (v) obtaining a set of the grammar production rules  $P_e$  from the united grammar specification UG, which contain the current non-terminal symbol as their target non-terminal;
- (vi) for each unified grammar production rule P in the set of the grammar production rules  $P_e$  obtained from the previous step (v), taking each symbol one by one from a list of terminal symbols and/or non-terminal symbols corresponding to the source language grammar  $G_s$ , determining whether it is a terminal symbol or a non-terminal symbol;
- (vii) for each terminal symbol obtained from the previous step, which is equivalent to a corresponding symbol in the list of tokens T of the input text in the source language  $L_s$ , considering the next symbol in said list of terminal symbols and/or non-terminal symbols corresponding to the source language grammar  $G_s$  and for each non-terminal symbol  $E_s$  obtained from the previous step, repeating step (v) onwards with  $E_s$  as the current non-terminal symbol;
- (viii) if all the symbols in the said list of terminal symbols and/or non-terminal symbols corresponding to the source language grammar G<sub>s</sub> match with all the symbols in the list of tokens T

Amendment dated May 5, 2008

After Final Office Action of February 4, 2008

of the input text in the source language L<sub>s</sub>, obtaining a list of symbols t corresponding to the target language grammar G<sub>t</sub> from the unified grammar production rule P and for those symbols which do not match, repeating step (vi) onwards for a next unified grammar production rule P defined for the non-terminal symbol 'E';

- (ix) taking each symbol one by one, from the list of symbols t corresponding to the target grammar G<sub>t</sub> and determining whether it is a terminal symbol or a non-terminal symbol;
- (x) for each terminal symbol obtained from the previous step outputting the symbol, and considering the next symbol and for each non-terminal obtained from the previous step, obtaining another unified grammar production rule P corresponding to that non-terminal symbol and repeating the previous step with the new unified grammar production rule, till all the symbols in the list of symbols t corresponding to the target language grammar  $G_t$  are exhausted.
- 2. (Original) The method as claimed in claim 1, wherein the unified grammar specification UG, for the grammars  $G_1$  to  $G_n$  of languages  $L_1$  to  $L_n$ , is created by the steps of:
- (i) for every production rule P of the grammars  $G_1$  to  $G_n$ , of the languages  $L_1$  to  $L_n$ , defining a unified production rule  $P_1$  in the unified grammar specification UG having the target non-terminal symbol of the production rule P as its target non-terminal symbol; and
- (ii) for each grammar  $G_1$  to  $G_n$  creating a list of terminal symbols and/or non-terminal symbols in the said production rule  $P_1$  and adding each and every symbol in the list of terminal symbols and/or non-terminal symbols that are represented by the target non-terminal symbol in the production rule P to the said unified production rule  $P_1$  and repeating previous step for the next production rule of the grammars  $G_1$  to  $G_n$ .